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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,729

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Stephen Daniel Gherardini

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11/01/2004

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EXAMINER

HYEON, HAE M

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,729

Applicant(s)

GHERARDINI, STEPHEN DANIEL

Examiner

Hae M Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-8 and 11-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 14 and 15 are objected to because of the following informalities:
 - Claim 14, line 14 recites, “pin-receiving holes,” but line 17 recites, “pin-receiving bores.”
The terminology for the same element should be consistent through out the claims.
 - Claim 15, line 20, the examiner suggests the applicant to change “said tips” to -- said standoff tips --.

Appropriate correction is required.

2. Claim 15 recites the limitation "deflectable terminus" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
4. Claims 13 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential element, such omission amounting to a gap between the element. See MPEP § 2172.01. The omitted element is: the motherboard lying on the midplane.

According to the present specification, the instant invention comprising a motherboard having a plurality of guide pins and first and second daughter boards connect to each other through the motherboard. However, claims 13 and 15-18 do not recite the motherboard.

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The examiner advises the applicant to be careful not to create duplicate claims between claims 11 and 15 when amending claim 15 to recite the motherboard, since these two claims have very similar limitations.

5. Claim 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, line 8 recites, “at least one **terminus** that has a **terminus tip**” and lines 11 recites, “the corresponding **deflectable terminus**.” However, lines 13-14 recites, “the deflectable terminus having a **tip**.” First, it is not clear whether the terminus and the terminus tip in line 8 is the same terminus and the terminus tip recited in line 13-14.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al (6,582,133 B2) in view of Meis et al (6,390,690 B1).

Harris discloses a fiber optic connector system comprising a housing (not shown) having opposite first and second end portions and a midplane 110 lying between the end portions, first and second daughter boards 122 and 125, and first and second connector assemblies 116 and 118 mounted respectively on the first and second daughter boards 122 and 125. Each of the first and

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second connector assemblies 116 and 118 includes a fiber optic connector 130 and 132.

However, the connectors of Harris do not show at least one terminus having terminus tip, a mounting bracket fixed to the corresponding daughter board and a pair of guide pin and pin-receiving holes. Harris discloses alignment device 140 in form of a tongue extending from opposite faces of the motherboard 110 to align the first and second connector assemblies 116 and 118. However, each of the fiber optic connectors 130 and 132 does not have a hole for receiving the alignment tongue 140.

Meis discloses a fiber optic connector system comprising having a mounting bracket 56 and a terminus 12 of a connector 20 slideably mounted on the mounting bracket 56 allowing a longitudinal movement of the connector 20. When the connector 20 is mated with a mating connector 30, a terminus tip of the terminus 12 abuts with a terminus tip of the mating connector's terminus 14. Meis also discloses a pair of alignment pins 80 on a board 18 received in a pair of pin-receiving holes 74 for aligning the connector 30.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the connector taught by Harris such that it would have a mounting bracket that allows longitudinally slideable movement of the connector and alignment pins and pin-receiving holes as taught by Meis because the longitudinal movement of the connector maintains low optical loss in the connection and the alignment pin and pin-receiving holes properly aligns the connectors.

Allowable Subject Matter

8. Claims 6-8 and 11-12 are allowed.

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9. Claims 13 and 15-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is an examiner's statement of reasons for allowance: In combination with all the limitations recited in the independent claim, all the prior arts do not show a fiber optic connector system comprising a housing, a fiber optic connectors, a motherboard, first and second daughter boards, and standoff. Each fiber optic connector includes terminus having a terminus ferrule with a ferrule tip. In addition, claim 6 recites a pair of guide assemblies including a guide pin element and a pin-receiving bore element. Claim 11 recites the standoffs having standoff tips lying on opposite sides of the corresponding connector. The standoff tips are positioned to pass into the motherboard hole and abut one another only after a deflectable terminus of the fiber optic connectors has been deflected outwardly, but before the deflectable terminus is deflected outward beyond the predetermined maximum outward position.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

11. Applicant's arguments with respect to claims 6-8 and 11-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh hnh

Hae Moon Hyeon